

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended): A low-emission adhesive based on comprising an aqueous, protective-colloid-free polymer dispersion or water-redispersible dispersion powders, obtainable prepared therefrom, of vinyl ester-ethylene copolymers containing free carboxylic acid groups, obtainable obtained by free-radically initiated emulsion polymerization, in aqueous medium and in the presence of at least one emulsifier, of a comonomer mixture comprising

- a) from 5 to 50% by weight of ethylene, ✓ 55%
- b) from 20 to 80% by weight of at least one vinyl ester selected from the group consisting of vinyl esters of unbranched or branched carboxylic acids having 1 to 9 carbon atoms whose homopolymers have a glass transition temperature $T_g > 0^{\circ}\text{C}$, ✓ 15%
- c) from 5 to 70% by weight of at least one vinyl ester selected from the group consisting of a vinyl ester of a branched carboxylic acids having 8 to 13 carbon atoms whose homopolymers have a glass transition temperature $T_g < 0^{\circ}\text{C}$,
- d) from 0.5 to 10% by weight of at least one ethylenically unsaturated monocarboxylic or dicarboxylic acid having 3 or 4 carbon atoms,
- e) from 0 to 10% by weight of at least one ethylenically unsaturated, hydroxyalkyl-functional comonomer,
- f) from 0 to 10% by weight of a further mono- or polyethylenically unsaturated comonomer,

the % by weight being based in each case on the overall weight of the comonomers and adding up to 100% by weight, and the dispersion obtained therewith optionally being dried if desired, wherein said vinyl ester-ethylene copolymers are free of moieties derived from (meth)acrylate alkyl esters, and wherein said copolymers have a glass transition temperature of between -60°C and about 10°C.

2. (previously amended): The low-emission adhesive as claimed in claim 1, wherein vinyl esters b) copolymerized are at least one member selected from the group consisting of vinyl acetate, vinyl propionate, vinyl butyrate, 1-methylvinyl acetate, vinyl pivalate, and vinyl esters of α -branched monocarboxylic acids having 9 carbon atoms.

3. (previously amended): The low-emission adhesive as claimed in claim 1, wherein vinyl esters c) copolymerized are at least one member selected from the group consisting of vinyl 2-ethylhexanoate, vinyl esters of α -branched monocarboxylic acids having 10 or 11 carbon atoms, and vinyl esters of branched monocarboxylic acids having 10 to 13 carbon atoms.

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4. (original): The low-emission adhesive as claimed in claim 1, wherein the copolymerized comonomer d) comprises at least one member selected from the group consisting of acrylic acid, methacrylic acid, itaconic acid, fumaric acid, and maleic acid.

5. (original): The low-emission adhesive as claimed in claim 1, wherein the copolymerized comonomer e) comprises at least one member selected from the group consisting of methacrylic and acrylic hydroxyalkyl esters having a C₁ to C₅ alkyl radical.

6. (original): The low-emission adhesive as claimed in claim 1, wherein copolymerized comonomer f) comprises at least one member selected from the group consisting of ethylenically unsaturated carboxamides, ethylenically unsaturated sulfonic acids and their salts, and vinylpyrrolidone.

7. (currently amended): The low-emission adhesive as claimed in claim 1, wherein said vinyl acetate-ethylene copolymer is a copolymer of a) from 10 to 40% by weight of ethylene, b) from 35 to 70% by weight of vinyl acetate, c) from 10 to 45% by weight of VeoVa10® and/or VeoVa11® vinyl esters of α -branched monocarboxylic acids having 10 or 11 carbon atoms, d) from 2 to 6% by weight of acrylic acid and/or methacrylic acid, e) from 0 to 5% by weight of hydroxyethyl acrylate, and f) from 0 to 2% by weight of acrylamide.

8. (currently amended): A process of adhering a covering to a substrate which comprises applying to at least a portion of at least one of the covering and substrate surfaces, an adhesive-effective amount of the low-emission adhesive of ~~any of claims 1-7~~ claim 1, and contacting the surfaces of the covering and the substrate.

9. (original): The process of claim 8 wherein the covering is flooring.

10. (previously amended): The process of claim 8 wherein the covering is a ceiling covering.

11. (original): The vinyl ester-ethylene copolymer of claim 1 having free carboxylic acid groups derived from (meth)acrylic acid.

12. (currently amended) A low-emission adhesive based on an aqueous, protective-colloid-free polymer dispersion or water-redispersible dispersion powders, obtainable therefrom, of vinyl ester-ethylene copolymers containing free carboxylic acid groups, obtainable by free-radically initiated emulsion polymerization, in aqueous medium and in the presence of at least one emulsifier, of a comonomer mixture comprising

- a) from 10 to 40 weight percent ethylene;
- b) from 35 to 70 weight percent vinyl acetate;
- c) from 10 to 45 % of one or more vinyl esters of C₁₀₋₁₁ carboxylic acids having a Tg in their homopolymers of 0°C;
- d) from 2-6 weight percent of at least one of methacrylic acid or acrylic acid,

the % by weight being based in each case on the overall weight of the comonomers and adding up to 100% by weight, and the dispersion obtained therewith being dried if desired, wherein said vinyl ester-ethylene copolymers are free of moieties derived from (meth)acrylate alkyl esters and wherein said copolymers have a glass transition temperature of between -60°C and about -10°C.

13. (currently amended): A low-emission adhesive based on an aqueous, protective-colloid-free polymer dispersion or water-redispersible dispersion powders, obtainable therefrom, of vinyl ester-ethylene copolymers, obtainable by free-radically initiated emulsion polymerization, in aqueous medium and in the presence of at least one emulsifier, of a comonomer mixture consisting essentially of

- a) from 5 to 50% by weight of ethylene,
- b) from 20 to 80% by weight of at least one vinyl ester selected from the group consisting of vinyl esters of unbranched or branched carboxylic acids having 1 to 9 carbon atoms whose homopolymers have a glass transition temperature $T_g > 0^\circ\text{C}$,
- c) from 5 to 70% by weight of at least one vinyl ester selected from the group consisting of a vinyl ester of a branched carboxylic acids having 8 to 13 carbon atoms whose homopolymers have a glass transition temperature $T_g < 0^\circ\text{C}$,
- d) from 0.5 to 10% by weight of at least one ethylenically unsaturated monocarboxylic or dicarboxylic acid having 3 or 4 carbon atoms,
- e) from 0 to 10% by weight of at least one ethylenically unsaturated, hydroxyalkyl-functional comonomer,
- f) from 0 to 10% by weight of a further mono- or polyethylenically unsaturated comonomer,

the % by weight being based in each case on the overall weight of the comonomers and adding up to 100% by weight, and the dispersion obtained therewith being dried if desired wherein said vinyl ester-ethylene copolymers are free of moieties derived from (meth)acrylate alkyl esters, and wherein said copolymers have a glass transition temperature of between -60°C and about -10°C.

14. (previously added) The vinyl ester-ethylene copolymer of claim 13, wherein said vinyl ester whose homopolymers have a glass transition temperature $T_g > 0^\circ\text{C}$ are selected from the group consisting of vinyl acetate, vinyl propionate, vinyl butyrate, and mixtures thereof.

15. (previously added): The vinyl ester-ethylene copolymer of claim 13, wherein said vinyl ester whose homopolymers have a glass transition temperature $T_g < 0^\circ\text{C}$ are selected from the group consisting of vinyl esters of 2-ethylhexanoic acid, α -branched monocarboxylic acids having 10 or 11 carbon atoms and vinyl esters of branched monocarboxylic acids having 10-13 carbon atoms, and mixtures thereof.

16. (previously added): The vinyl ester-ethylene copolymer of claim 14, wherein said vinyl ester whose homopolymers have a glass transition temperature $T_g < 0^\circ\text{C}$ are selected from the group consisting of vinyl esters of 2-ethylhexanoic acid, α -branched monocarboxylic acids having 10 or 11 carbon atoms and vinyl esters of branched monocarboxylic acids having 10-13 carbon atoms, and mixtures thereof.

17. (new): The adhesive of claim 1, wherein said ethylenically unsaturated monocarboxylic or dicarboxylic acid having 3 or 4 carbon atoms is present in said copolymer in an amount of from about 2 weight percent to about 6 weight percent based on the weight of said copolymer.

18. (new): The adhesive of claim 13, wherein said ethylenically unsaturated monocarboxylic or dicarboxylic acid having 3 or 4 carbon atoms is present in said copolymer in an amount of from about 2 weight percent to about 6 weight percent based on the weight of said copolymer.

19. (new): The process of claim 8 wherein said substrate is an alkaline, cementitious substrate.